Mechanical Engineer Job Description Adaptive Innovations Corp. provides complete turn-key automated solutions specializing in custom automation, robotics, tooling and testing equipment. Adaptive is located in Lakewood, CO and is a rapidly growing firm offering an exciting work environment with constantly changing and growing challenges. Adaptive is seeking a creative and driven mechanical engineer to join our team.

Responsibilities:

• Design & develop mechanical system solutions based on engineering principles. Support design decisions with analysis and calculations, as required.

• Participate in peer to peer design reviews and provide critical feedback to colleagues.

• Identify and manage vendors during fabrication and build process.

• GD&T and drafting of mechanical components and sub-assemblies.

• Develop PFMEA’s for machines and solutions to minimize project risks.

• Provide technical support and guidance to technician team to insure proper machine assembly and functionality.

• Resolve operational problems related to projects and minimize delays or unexpected cost increases.

• Ensure all relevant safety objectives and legal requirements are observed for all work completed. • Interpret client requirements, identify and address design parameters and engineering problems and ensure solutions are implemented accurately and in budget.

• Develop project requirements/specifications from sales concepts and customer requests.

• Present and review mechanical system design to customer representatives.

Engineering:

• Analyze project requirements, develop solutions, and perform technical calculations supporting design. Solutions shall consider machine performance, project timing, and project budget before implementation.

• Provide 3D modeling in SolidWorks of all solutions developed. Insure designs can be manufactured using readily available manufacturing processes.

• GD&T and drafting of custom parts and assemblies per ASME Y14.5M

• Create accurate Bills of Material documentation.

• Selection of appropriate materials and processes for custom parts.

• Identification and selection of technology and off the shelf solutions that can be implemented to achieve the project goals.

• Mechanical design of customized solutions including; motor sizing, cylinder sizing, pneumatic/electropneumatic and electrical routing.

• Tracking of project spend as compared to provided project budgets.

• Assist in the bring-up of machines using statistical analysis to effectively identify issues, determine root cause, and quickly develop resolutions.

• Provide hands on assembly assistance and precise measurement techniques in order to collect data and identify root causes of machine bring-up issues.

Project Execution:

• Oversee project workflow and support internal and external resources to ensure timely delivery of projects, expected quality, and allotted budget.

• Support manufacture, build and validation of systems.

• Utilize statistical methods for validation of systems.

• Create customer documentation.

• Maintain accurate records and files according to quality standard.

• Commission customized products and systems onsite and at customer facilities.

Job requirements:

• Applicants must be a Citizen of the United States.

• A Bachelor’s Degree in Mechanical Engineering (or similar related degree) is required.

• 4-10 years related job experience.

• Proficient in SolidWorks software and MS Office suite.

• Strong fundamental knowledge of mechanical design and its application in automated industrial designs including:

* Specification of motors and gear trains
* Mechanism design
* Pneumatics and vacuum system design
* Engineering kinematics
* Tooling and fixturing design
* Materials selection and process specification

• Drawing generation and design documentation per standards.

• Critical thinking with exceptional problem solving skills.

• Ability to work independently or in a team environment.

• Efficiently organize and plan work tasks to meet company goals.

• Proactive, resourceful & highly motivated with good communication skills and ability to work in high output environment.

• Travel as required to support projects.

To Apply:

• Please submit cover letter, resume, and salary requirements to HR@a-i-corp.com